

# 2008 Annual Drinking Water Quality Report

## Bayview at Kent Narrows (PWSID MD0170013)

We are pleased to present the 2008 Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The source of our drinking water is the Aquia Aquifer, which lies approximately 215 feet below the ground. An aquifer is like an underground reservoir or deposit of water that is tapped by drilling wells and pumping the water to the surface for distribution. The 215 feet of ground between surface sources of contamination and this underground source helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your distribution system.

A source water assessment was performed by the Maryland Department of the Environment (MDE). This assessment outlines the potential sources of contamination for our raw water supply. The final report was issued in the spring of 2003. A copy can be obtained through Queen Anne's County Department of Planning and Zoning, Queen Anne's County Public Libraries, or MDE.

It was determined that the Bayview at Kent Narrows water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. However, it was determined that the water supply is susceptible to arsenic, a naturally occurring contaminant.

We are pleased to report that our drinking water is safe and meets federal and state requirements. The following report is provided

in compliance with federal regulations and will be provided annually. This report outlines the quality of our finished water and what that quality means.

Bayview at Kent Narrows routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2008. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, *including bottled water*, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does *not necessarily* pose a health risk.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep our water at or below the levels specified by law as being safe for consumption.





## Detected Contaminants NOT in Violation of the MCL

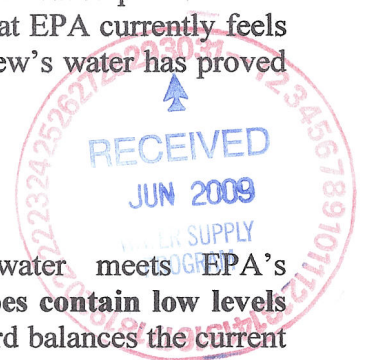
The data presented in this table is from testing performed between March 2001 and December 2008. Some regulated contaminants are monitored less frequent than once per year. In addition to over sixty undetected substances that were subject to testing, Bayview at Kent Narrows did find some regulated and unregulated substances present in the water system at levels below the maximum allowable level (MCL), which is determined safe by the EPA. These substances are shown below, along with the MCL and MCLG for each one detected (if applicable).

<i>Contaminant</i>	<i>Level Detected</i>	<i>Unit of Measurement</i>	<i>MCL</i>	<i>MCLG</i>	<i>Likely Source of Contamination</i>
Arsenic	4.3	ppb	10	0	Erosion of natural deposits.
Barium	0.1	ppm	2	2	Erosion of natural deposits.
Copper (90 <sup>th</sup> percentile)	0.22	ppm	AL = 1.3	0	Corrosion of household plumbing systems.
Fluoride	0.36	ppm	4	4	Erosion of natural deposits
Gross Beta	11	pCi/L	50	0	Erosion of natural deposits.
Gross alpha	3	pCi/L	15	0	
Haloacetic Acids	0	ppb	60	-	Byproduct of drinking water disinfection.
Nitrate	< 1.0	ppm	10	10	Runoff from fertilizer use, erosion of natural deposits.
<sup>222</sup> Radon	85	pCi/L	Unregulated <sup>b, c</sup>		
Sodium	46	ppm	Unregulated <sup>b</sup>		
Total Trihalomethanes	0.67	ppb	80	-	Byproduct of drinking water disinfection.

Detection of these substances in the drinking water does not constitute a known threat to public health because they were found only at levels less than the MCL and below the level that EPA currently feels may constitute a health threat. MCL's are set at very stringent levels, and Bayview's water has proved to be below those levels for the constituents listed above.

**Radon** is a radioactive gas that you cannot see, taste, or smell. It is throughout the United States and can move up through the ground into a home through cracks and holes in the foundation. Radon can build to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in the air. Radon is a known human carcinogen. Radon can lead to lung cancer and stomach cancer. If you are concerned about radon in your home, test the air in your home. Fix your home if the level of radon in the air is 4 picoCuries per liter or higher. For information, call EPA's Radon Hotline at (800) SOS-RADON.

While your drinking water meets EPA's standard for arsenic, **it does contain low levels of arsenic**. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from the drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations. Arsenic is also linked to other health effects such as skin damage and circulatory problems. **Some people may be more vulnerable** to contaminants in the drinking water than the general population. Immuno-compromised persons, such as those people with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some



## Definitions

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level (AL) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.

PicoCurie per liter (pCi/L) - Unit of measurement for radioactivity.





elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Thank you for allowing us to continue providing your family with clean, quality water

this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

*Please remember to conserve water!*

**Tom Shade, President  
Bayview at Kent Narrows  
(443)980-1079/(410)827-5514**

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The MCL for Gross Beta is 4 millirems per year. EPA considers 50 pCi/L to be the level of concern for Gross Beta.

<sup>a</sup> Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

<sup>b</sup> EPA is considering establishing the MCL for <sup>222</sup>Radon between 300 pCi/L and 4,000 pCi/L.  
The MCL for Gross alpha is 15 pCi/L. If level exceeds 5 additional sampling would be required.

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**Lead** -if present,has been elevated levels of lead can cause serious health problems,especially for pregnant women and young children. **Lead** in drinking water is primarily from materials and components associated with service lines and home plumbing. Maryland water plant operations is responsible for providing high quality drinking water,but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water,you may wish to have your water tested. Information on lead in drinking water,testing methods,and steps you can take to minimize exposure is available from the EPA Safewater Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

